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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,664	05/30/2001	Taro Ikeda	35.C15393	5135

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EXAMINER

PENDERGRASS, KYLE M

ART UNIT PAPER NUMBER

2624

DATE MAILED: 12/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/866,664	Applicant(s) IKEDA, TARO	
	Examiner Kyle M Pendergrass	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 & 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanuma et al. (US 5,200,763) & Masuda et al. (US 6,280,208).

Regarding claim 1, Tanuma et al., teach an image forming means (**column 8:lines 22-24**, LED printer with LED array print head) for forming an image on the image bearing body (**column 1:lines 8-11**, the LED array printer sets images on image bearing body paper). Tanuma et al., also teach signal wire SD for transmitting a serial data signal via the bus 36 (**column 3:lines 28-30 & column 5:lines 48-55**).

Tanuma et al., do not teach a holder in contact with the wire and metal frame. However, Masuda et al., teach:

- a feed cable for transmitting an electrical signal (**column 5:line 53**, electric wire 6);
- a holder for holding the feed cable, the holder having a substrate made of resin (**column 5:lines 40-41**, synthetic resin housing 2) and an electro-conductive sheet installed on the substrate (**column 5:lines 43-44**, conductive metal shield member 4 on the lower surface of the housing 2);
- and a metal frame attached to the holder (**column 6:line 48**, case 29, & **column 1:lines 18-19**, in conventional art the cases are metal);
- wherein the electro-conductive sheet is installed in such a manner as to contact the feed cable (**column 5:lines 51-55**, conductive member 4 contacts the electric wire 6) and the metal frame (**column 6:lines 48-54**, conductive member 4 is ground to case 29).

Accordingly, it would have been obvious to have used the cable holder of Masuda et al., in the image forming apparatus of Tanuma et al., because it effectively holds and grounds an electric wire to a case frame without damaging the wire.

Regarding claim 2, the rejection of claim 1 is respective of claim 2. See Masuda et al. wherein the electro-conductive sheet is removably adhered on the substrate (**column 5:lines 43-44**, conductive metal shield member 4 is placed on the lower surface of the housing 2).

Regarding claim 4, the rejection of claim 1 is respective of claim 4. See Tanuma et al., teach an image forming means comprising an LED (**column 8:lines 22-24**, LED printer with LED array print head) for forming an image on the image bearing body (**column 1:lines 8-11**, the LED array printer sets images on image bearing body paper based on an image forming signal). Tanuma et al., also teach signal wire SD for transmitting a serial data signal via the bus 36 (**column 3:lines 28-30 & column 5:lines 48-55**).

Regarding claim 6, the rejection of claim 1 is respective of claim 2. See Masuda et al., teaching of a fixing member which pressingly fixes the cable to the electro-conductive sheet (**column 5:lines 51-55**, conductive member 4 is fixed to the electric wire 6).

Regarding claim 3, Tanuma et al., and Masuda et al., disclose substantially the claimed invention as set forth in the discussion above for claim 1. Tanuma et al., and Masuda et al., do not disclose expressly that the electro-conductive sheet comprise a resin layer along with the electro-conductive layer.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include a resin layer with the electro-conductive sheet. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the electro-conductive sheet taught by Tanuma et al., and Masuda et al., or the claimed resin layer with the electro-conductive sheet because both components perform the same function of grounding the cable with the frame. Therefore, it

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would have been obvious to one of ordinary skill in this art to modify Tanuma et al., and Masuda et al., with an additional resin layer to obtain the invention as specified in claim 3.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanuma et al. (US 5,200,763) & Masuda et al. (US 6,280,208) & Nishitani et al. (US 5,798,483).

Regarding claim 5, Tanuma et al., and Masuda et al., teach an image forming apparatus according to claim 1, but do not teach wherein the feed cable transmits high frequency electric signals, and the feed cable is grounded to the metal frame by the electro-conductive sheet to thereby reducing high frequency noises.

However, Nishitani et al. teach a conductive grounding device capable of noise suppression at high frequency (**column 4:lines 1-27**).

Accordingly, it would have been obvious to one skilled in the art at the time of the invention to have incorporated the high frequency noise suppression taught by Nishitani et al., in the image forming apparatus of Tanuma et al., and Masuda et al., because, as noted by Nishitani et al., in column 1, lines 29-32, it provides a simple and inexpensive grounding device that can effectively suppress noise.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanuma et al. (US 5,200,763) & Masuda et al. (US 6,280,208) & Takiguchi et al. (US 6,268,566).

Regarding claim 7, Tanuma et al., and Masuda et al., teach an image forming apparatus according to claim 6, but do not teach a plurality of fixing members which fix the feed cables from multiple directions. However, Takiguchi et al., teach an electric wire holder for laterally holding a plurality of electric wires (**column 4:lines 14-18**).


Accordingly, it would have been obvious to one skilled in the art at the time of the invention to have used the wire harness taught by Takiguchi et al., in the apparatus of Tanuma et al., and Masuda et al., because it provides an ability to arrange multiple wires of the printing apparatus.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyle Pendergrass whose telephone number is (703) 306-3445. The examiner can normally be reached on Monday-Friday 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (703) 308-7452. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9700.



**KING Y. POON
PRIMARY EXAMINER**